

1 1. A method of initiating a connection via a network for a streaming data item between a
2 client for the streaming data item and a streaming data item server for the streaming data
3 item, the client and the streaming data item server being accessible to each other via the
4 network and the method comprising the steps performed in a search server that is
5 accessible to the client and the streaming server via the network of:

6 receiving a specification of the streaming data item from the client via the
7 network;

8 using the specification to make a query on a database system that is accessible to
9 the search server, the query returning a first identifier that identifies the streaming data
10 item; and

11 providing the first identifier and a second identifier to the streaming data item
12 server, the second identifier identifying the client and the first identifier and the second
13 identifier being usable by the streaming data item server to establish the connection.

1 2. The method of initiating a connection set forth in claim 1 wherein:

2 the client, the streaming data item server, and the search server communicate via
3 the network using the HTTP protocol;

4 the first identifier is a URL for the streaming data item; and

5 the second identifier is a current IP address for the client.

1 3. The method of initiating a connection set forth in claim 1 wherein:

2 the database system is an object relational database system that includes a table
3 containing an object that represents the streaming data item,

4 an open method for the object is defined in the database system, the open method
5 returning the first identifier; and

6 the database system responds to the query by executing the open method and
7 returning the first identifier.

1 4. The method of initiating a connection set forth in claim 3 wherein:

2 the client, the streaming data item server, and the search server communicate via
3 the network using the HTTP protocol;

4 the first identifier is a URL for the streaming data item; and
5 the second identifier is a current IP address for the client.

1 **5.** Connection initiation apparatus that has access to a network whereto a streaming data
2 item server and a client for a streaming data item also have access, /
3 the connection initiation apparatus comprising:

4 a search server; and
5 a database system to which the search server has access,
6 the search server responding to a specification of the streaming data item received from
7 the client by using the specification to make a query for the database system, the database
8 system responding to the query by returning a first identifier that identifies the streaming
9 data item and the search server thereupon providing the first identifier and a second
10 identifier that identifies the client to the streaming data item server, the first and second
11 identifiers being usable by the streaming data item server to establish a connection for the
12 streaming data item between the client and the streaming data item server .

1 **6.** The connection initiation apparatus set forth in claim 5 wherein:

2 the client, the streaming data item server, and the search server communicate via
3 the network using the HTTP protocol; and
4 the first identifier is a URL for the streaming data item; and
5 the second identifier is a current IP address for the client.

1 **7.** The connection initiation apparatus set forth in claim 5 wherein:

2 the database system is an object relational database system that includes a table
3 containing an object that represents the streaming data item,
4 an open method for the object is defined in the database system, the open method
5 returning the first identifier; and
6 the database system responds to the query by executing the open method and
7 returning the first identifier.

1 **8.** The connection initiation apparatus set forth in claim 7 wherein:

2 the client, the streaming data item server, and the search server communicate via
3 the network using the HTTP protocol; and
4 the first identifier is a URL for the streaming data item; and
5 the second identifier is a current IP address for the client.

1 **9.** A method of establishing a connection via a network for a streaming data item
2 between a client for the streaming data item and a streaming data item server for the
3 streaming data item, the client and the streaming data item server being accessible to each
4 other via the network and the method comprising the steps performed in the streaming
5 data item server of:

6 receiving via the network a first identifier that identifies the streaming data item
7 and a second identifier that identifies the client, the first and second identifiers being
8 received from a search server that uses a specification of the streaming data item received
9 from the client via the network to obtain the first identifier; and
10 using the first and second identifiers to establish the connection.

1 **10.** The method of establishing a connection set forth in claim 9 wherein;
2 the client, the streaming data item server, and the search server communicate via
3 the network using the HTTP protocol;
4 the first identifier is a URL for the streaming data item; and
5 the second identifier is a current IP address for the client.

1 **11.** The method of establishing a connection set forth in claim 9 wherein:
2 the search server further uses the specification to make a query on a database
3 system that is accessible to the search server, the query returning the first identifier.

1 **12.** The method of establishing a connection set forth in claim 11 wherein;
2 the client, the streaming data item server, and the search server communicate via
3 the network using the HTTP protocol;
4 the first identifier is a URL for the streaming data item; and
5 the second identifier is a current IP address for the client.

1 **13.** The method of establishing a connection set forth in claim 9 wherein:
2 the database system is an object relational database system that includes a table
3 containing an object that represents the streaming data item,
4 an open method for the object is defined in the database system, the open method
5 returning the first identifier; and
6 the database system responds to the query by executing the open method and
7 returning the first identifier.

1 **14.** The method of establishing a connection set forth in claim 13 wherein;
2 the client, the streaming data item server, and the search server communicate via
3 the network using the HTTP protocol;
4 the first identifier is a URL for the streaming data item; and
5 the second identifier is a current IP address for the client.

1 **15.** Apparatus that establishes a connection, the apparatus having access to a network to
2 which a client for a streaming data item and a search server also have access,
3 the apparatus that establishes a connection comprising:
4 a streaming data item server that provides streaming data items to clients via the
5 network; and
6 a receiver in the streaming data item server,
7 the receiver receiving a first identifier for the streaming data item and a second identifier
8 for the client from the search server via the network, the search server using a
9 specification of the streaming data item received from the client via the network to obtain
10 the first identifier and the receiver providing the first identifier and the second identifier
11 to the streaming data item server, the streaming data item server using the first identifier
12 and the second identifier to establish a connection for the streaming data item between
13 the client and the streaming data item server.

1 **16.** The apparatus of claim 15 wherein:
2 the client, the streaming data item server, and the search server communicate via
3 the network using the HTTP protocol;

4 the first identifier is a URL for the streaming data item; and
5 the second identifier is a current IP address for the client.

1 **17. The apparatus of claim 15 wherein:**

2 the search server further uses the specification to make a query on a database
3 system that is accessible to the search server, the query returning the first identifier.

1 **18. The apparatus of claim 17 wherein:**

2 the client, the streaming data item server, and the search server communicate via
3 the network using the HTTP protocol;

4 the first identifier is a URL for the streaming data item; and
5 the second identifier is a current IP address for the client.

1 **19. A data storage device, characterized in that:**

2 the data storage device contains code which when executed by a processor implements a
3 method of initiating a connection via a network for a streaming data item between a client
4 for the streaming data item and a streaming data item server for the streaming data item,
5 the client and the streaming data item server being accessible to each other via the
6 network and the method comprising the steps performed in a search server that is
7 accessible to the client and the streaming server via the network of:

8 receiving a specification of the streaming data item from the client via the
9 network;

10 using the specification to make a query on a database system that is accessible to
11 the search server, the query returning a first identifier that identifies the streaming data
12 item;

13 providing the first identifier and a second identifier to the streaming data item
14 server, the second identifier identifying the client and the first identifier and the second
15 identifier being usable by the streaming data item server to establish the connection.

1 **20.** The data storage device set forth in claim 19 further characterized in that:

2 the client, the streaming data item server, and the search server communicate via

3 the network using the HTTP protocol;

4 the first identifier is a URL for the streaming data item; and

5 the second identifier is a current IP address for the client.

1 **21.** The data storage device set forth in claim 19 further characterized in that:

2 the database system is an object relational database system that includes a table

3 containing an object that represents the streaming data item,

4 an open method for the object is defined in the database system, the open method

5 returning the first identifier; and

6 the database system responds to the query by executing the open method and

7 returning the first identifier.

1 **22.** The data storage device set forth in claim 21 further characterized in that:

2 the client, the streaming data item server, and the search server communicate via

3 the network using the HTTP protocol;

4 the first identifier is a URL for the streaming data item; and

5 the second identifier is a current IP address for the client.

1 **23.** A data storage device, characterized in that:

2 the data storage device contains code which when executed by a processor implements a

3 method of establishing a connection via a network for a streaming data item between a

4 client for the streaming data item and a streaming data item server for the streaming data

5 item, the client and the streaming data item server being accessible to each other via the

6 network and the method comprising the steps performed in the streaming data item server

7 of:

8 receiving via the network a first identifier that identifies the streaming data item

9 and a second identifier that identifies the client, the first and second identifiers being

10 received from a search server that uses a specification of the streaming data item received

11 from the client via the network to obtain the first identifier; and

12 using the first and second identifiers to establish the connection.

1 **24.** The data storage device set forth in claim 23 further characterized in that:
2 the client, the streaming data item server, and the search server communicate via
3 the network using the HTTP protocol;
4 the first identifier is a URL for the streaming data item; and
5 the second identifier is a current IP address for the client.

1 **25.** The data storage device set forth in claim 23 further characterized in that:
2 the search server further uses the specification to make a query on a database
3 system that is accessible to the search server, the query returning the first identifier.

1 **26.** The data storage device set forth in claim 25 further characterized in that:
2 the client, the streaming data item server, and the search server communicate via
3 the network using the HTTP protocol;
4 the first identifier is a URL for the streaming data item; and
5 the second identifier is a current IP address for the client.

1 **27.** The data storage device set forth in claim 23 further characterized in that:
2 the database system is an object relational database system that includes a table
3 containing an object that represents the streaming data item,
4 an open method for the object is defined in the database system, the open method
5 returning the first identifier; and
6 the database system responds to the query by executing the open method and
7 returning the first identifier.

1 **28.** The data storage device set forth in claim 27 further characterized in that:
2 the client, the streaming data item server, and the search server communicate via
3 the network using the HTTP protocol;
4 the first identifier is a URL for the streaming data item; and
5 the second identifier is a current IP address for the client.